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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,258	04/13/2004	Marc L. Vitantonio	NSEE 2 00007	3493

27885 7590 03/22/2007  
FAY SHARPE LLP  
1100 SUPERIOR AVENUE, SEVENTH FLOOR  
CLEVELAND, OH 44114

EXAMINER
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TYLER, STEPHANIE E

ART UNIT	PAPER NUMBER
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3754

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/823,258

Applicant(s)

VITANTONIO ET AL.

Examiner

Stephanie E. Tyler

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/13/2004</u> .   | 6) <input type="checkbox"/> Other: ____                           |

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Detailed Action

**Double Patenting**

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1 and 19 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,8,26,32 of U.S. Patent No. 5,716,007. Although the conflicting claims are not identical, they are not patentably distinct from each other because both inventions have the same inventive entity.

**Claim Rejections - 35 USC § 102**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Nottingham et al. (5,716,007).

The Nottingham et al. reference discloses in a motor operated sprayer (10), a discharge opening (62), a variable volume pump (12,14) having a pump axis (28) and having axially spaced apart fixed and movable ends (42), the fixed end being in flow communication with the discharge opening (62), the pump and discharge opening (62) are coaxial, an inlet (78) for connecting the pump (12,14) with fluid in a supply container (16), an outlet (58) for connecting the pump (12,14) with the discharge opening (62), an electric motor (94) with output shaft (96) rotatable about a motor axis (28) parallel to the pump axis (28), a cam (98) rotatably driven by the motor (94), and a cam follower (82) for displacing the movable end (42) of the pump (12,14), whereby rotation of the cam (98) axially displaces the movable end (42) toward and away from the fixed end for pumping fluid from the container (16) through the outlet (58) and discharge opening (62), the improvement consisting of: the cam (98) and the cam follower (82) having interengaging cam faces (100,90) for balancing lateral forces therebetween during rotation of the cam (98) relative to the cam follower (82), wherein each the cam (98) and cam follower (82) has an axis (28) and includes a first cam face (100) in a first plane intersecting the corresponding axis at an angle thereto, and a second cam face (90) in a second plane intersecting the first plane at an angle thereto.

Re: claims 5,15,18 the spring means biasing (84) the cam follower (82) axially toward the cam (98).

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Re: claim 8 the first cam face (100) of each the cam (98) and cam follower (82) has a first outer diameter, and the second cam face (90) of each the cam (98) and cam follower (100) has a second outer diameter less than the first diameter.

Re: claim 9 the first and second cam faces (100,90) has an axially outermost and an axially innermost point on the corresponding diameter.

Re: claim 10 the axially outermost points of the first and second cam faces (100,90) of each the cam (98) and cam follower (100) are in a plane transverse to the axis thereof.

Re: claim 11 the axially outermost points of the first and second cam faces (100,90) of each the cam (98) and cam follower (82) are diametrically opposed.

Re: claim 12 the axially innermost points of the first and second cam faces (100,90) of each the cam (98) and cam follower (82) are in a plane transverse to the axis thereof.

Re: claims 6, 13 and 16, the pump (12,14) includes a support (32) for axially slidably supporting the cam follower (82), the support (32) and cam follower (82) having rollers (86) and slots (88) interengaging to restrain relative rotation therebetween.

Re: claims 7,14,17,23 the support (32) includes a cylinder and the rollers (86) and slots (88) include diametrically opposite slots (88) in the cylinder and rollers (86) on the cam follower (82) received in the slots (88) (see fig.5).

Regarding claim 19, note in a motor operated sprayer (10), a discharge opening (62), a variable volume pump (12,14) having a pump axis (28) and having axially spaced apart fixed and movable ends (42), the fixed end being in flow communication

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with the discharge opening (62), an inlet (78) for connecting the pump (12,14) with fluid in a supply container (16), an outlet (58) for connecting the pump (12,14) with the discharge opening (62), an electric motor (94), a cam (98) rotatably driven by the motor (94), a cam follower (82) for displacing the movable end (42) of the pump (12,14), whereby rotation of the cam (98) axially displaces the movable end (42) toward and away from the fixed end for pumping fluid from the container (16) through the outlet (78) and discharge opening (62), and the pump (12,14) and cam follower (82) including interengaging means for axially slidably supporting (32) the cam follower (82), the improvement consisting of: the interengaging means including rollers (86) on one of the pump (12,14) and cam follower (82), and slots (88) on the other receiving the rollers (86).

Re: claim 20 the pump (12,14) includes a support (32) for the cam follower (82), the slots (88) being in the support (32).

Re: claim 21 the cam follower (82) has an axis (28) and the rollers are rotatable about an axis transverse to the axis (28) of the cam follower.

Re: claim 22 the axis of the rollers (86) is spaced from the axis (28) of the cam follower (82).

### ***Conclusion***

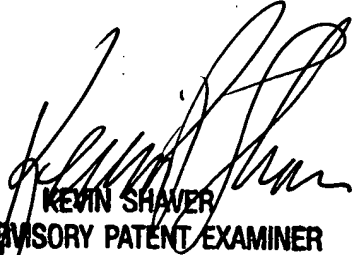
5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Jones et al. (3,904,116), Drewes (2,629,539) and Steiner et al. (5,338,495) are various types of motor operated sprayers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephanie E. Tyler whose telephone number is 571-272-8059. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SET

  
KEVIN SHAVER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700